

Serial No. 10/628,285
Amdt. dated June 22, 2004
Reply to Office Action of March 22, 2004

Docket No. K-0536

Amendments to the Specification:

Please replace paragraphs [0003]-[0004] with the following amended paragraphs:

[0003] The microwave oven defrosts or heats food by directing a microwave to the food, that causes molecules in the food to vibrate to generate frictional heat for the defrosting or the heating.

[0004] FIG. 1 illustrates a partly disassembled perspective view of a related art microwave oven. As shown, the microwave oven is provided with a base plate 10, a front plate 15 and a rear plate 13 mounted on a front end and a rear end of the base plate 10 vertical thereto respectively, an inner case 17 between the front plate 15 and the rear plate 13 to form a cooking chamber 20 therein, an outfit chamber 30 formed over the base plate 10[?] and sides[?] of the inner case 17, a front panel 40 attached to the front plate 15, a plurality of electric components in the outfit chamber 30, and an outer case 45 for enclosing the inner case 17 and the outfit chamber 30[[], fully]].

Please replace paragraph [0006] with the following amended paragraph:

[0006] The outfit chamber 30 is provided with a magnetron 31 for generating and directing a microwave to the cooking chamber 20, a transformer 32 for boosting a voltage of an external power and supplying to the magnetron 31, and a cooling fan 33 for cooling various components.

Please replace paragraphs [0009]-[0011] with the following amended paragraphs:

[0009] However, the application of the sealant is not convenient in above structure, failing to cover the abutting parts of the gaskets 55, perfectly. Then, as shown in FIG. 3, there may be a small gap 57 formed between the gaskets 55, a corner of the cooking chamber 17, and the sealant 56. Then, water or dirt may infiltrate therein, which is not sanitary, and may cause rust, or out of order of components when intensive. Moreover, the applied sealant 56 or the gap 57 harms a sense of beauty of the cooling chamber 20, and drops consumer satisfaction.

[0010] In the meantime, referring to FIG. 4, the air duct 60 is mounted on an underside of a ceiling of the cooking chamber 20. The air duct 60 draws in external air, circulates the air inside of the cooking chamber 20, for prevention of formation of dew on the door 41 during cooking, and discharging smell and smoke from food to an exterior. To do this, the air duct 60 has inlets 61 for introducing the external air passed through the outfit chamber 30 into the cooking chamber 20, and outlets 62 for drawing the air circulated inside of the cooling cooking chamber 20 and discharging to an exterior.

[0011] Such an air duct 60, in general formed of plastic, is fastened to an underside of ceiling with fastening members 63, such as screws, as shown in FIG. 4. However, such a fastening structure requires many assembly components, and a complicated assembly process, and time, which drops productivity.

Please replace paragraph [0031] with the following amended paragraph:

[0031] The inner case 200 is mounted on the base plate 100. [[a]] A cooking chamber 210 is formed inside of the inner case 200. The inner case 200 has an opening 215 in a front part for putting food into, and taking food out of the cooking chamber 210. In the meantime, since a microwave is directed to the ~~cooling~~ cooking chamber 210, the inner case 200 is formed of a material through which no microwave leaks, such as a metal.

Please replace paragraph [0040] with the following amended paragraph:

[0040] In the meantime, there is no lip at a part of the outer edge of the gasket 500 in contact with the opening 155 of the front plate 150. This is for smooth transition from the gasket 500 to the opening 155 of the front plate 150 for convenience of putting in and taking out food. However, when required, the lip 510 may be provided to the gasket 500 that comes into contact with the opening 215 of the inner case 200.

Please replace paragraphs [0044]-[0048] with the following amended paragraphs:

[0044] FIGS. 8 ~ [[19B]] 10B best shown fastening structures of an air duct 600, which forms a ceiling of the cooking chamber 210 and circulating air in the cooking chamber assembly

of the present invention, referring to which a structure for mounting the air duct 600 will be described in more detail.

[0045] The air duct 600 is attached to an upper side of an inside of the inner case 200. The panel 610, forming a ceiling surface of the cooking chamber 210, is substantially in a square form. There are a plurality of walls at edges of the panel 610, i.e., one pair of side walls 630, a front wall [[520]] 620, and a rear wall 640 substantially in vertical. The side walls 630 are in contact with the side walls of the inner case 200.

[0046] The air duct 600 has a plurality of apertures 625 and 635 for passing circulating air, for introducing the air ~~cooled~~ used to cool the components in the outfit chamber 300 into the air duct 600, and therefrom into the cooking chamber 210, and therefrom to an exterior after the air is circulated through the cooking chamber 210. As shown in FIG. 8, the apertures are formed in the sidewalls 630 and the front wall 620, and though not shown, may be formed in the panel 610.

[0047] In the case of the apertures 625 and 635 in FIG. 8, the apertures 635 in the sidewalls 630 introduce air from the outfit chamber 300 to the air duct 600, and the apertures 625 in the front wall 620 ~~supplies~~ supply the air introduced into the air duct 600 to the cooking chamber 210. In the meantime, the air circulated in the cooking chamber 210 is exhausted through a plurality of apertures (not shown) in the wall of the inner case 200, such as the rear wall, or in the panel 610. When the air is exhausted through the apertures in the panel 610, there

may be a partition (not shown) provided for preventing the exhausting air from mixing with the air introduced into the air duct 600 through the sidewall 630.

[0048] In the meantime, as shown in FIG. 8, a flange 650 is extended in a forward direction horizontally from an upper part of top of the front wall 620. Hooks 700 are extended upward from the front wall 620 to have an elasticity, for fastening the air duct 600 to the upper part of the inside of the inner case 200, directly. Detail of the hook 700 is shown in FIGS. 8 and 9,~~well~~.

Please replace paragraph [0057] with the following amended paragraph:

[0057] As the head 720 of the hook 700 keeps moving upward, the head 720 is inserted in the inserting hole 810 fully, when the upper part of the body 710 moves forward by an elastic restoring force, according to which the head 720 also moves forward. Then, as shown in FIG. [[19B]] 10B, the bracket 800 is fastened between the bottom of the head 720 and the top surface of the flange 650, the hook 700 is fastened very firmly.